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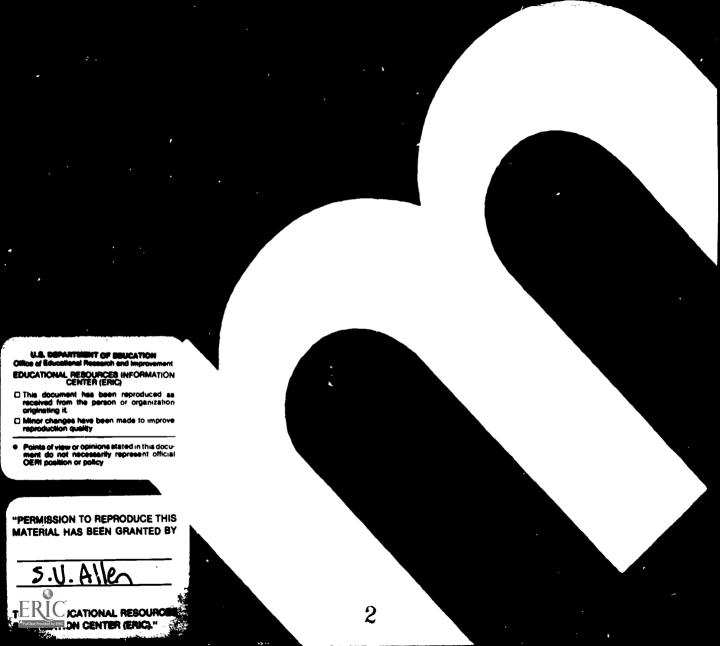
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ABSTRACT

This paper, one of the nine-booklet Teacher Quality Series, examines ten popular assumptions that underlie many new proposals to solve the problems of the teacher workforce. It is argued that many of these assumptions are unsupported by research on teaching. It is also suggested that the ability to attract, train and keep good teachers depends heavily on base salary, the organizational conditions of work, and the professional development opportunities in addition to the type of incentive system offered by the school. The following unsubstantiated assumptions (or "myths") are discussed: (1) pay teachers and they will teach better; (2) competition among teachers for career advancement and higher pay is a sound way to improve the quality of their service; (3) promotions and incentive pay will keep good teachers in teaching; (4) career ladders will encourage teachers to improve; (5) career ladders and incentive pay will attract more academically talented people into teaching; (6) teachers who are promoted up career ladders can evaluate other teachers for promotion; (7) since almost everyone can recall at least one great teacher, the characteristics of great teachers are easy to identify; (8) the scores students make on tests are a good measure of teacher effectiveness; (9) an effective teacher is equally effective in all settings; and (10) good teachers are born not made. A four-page reference list and a page of information concerning the Teacher Quality Series concludes the booklet. (JD)





MYTHS

Political Myths About Reforming TeachingNo. TQ84-4

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The views expressed in this paper are the author's and do not necessarily reflect the views of the Education Commission of the States

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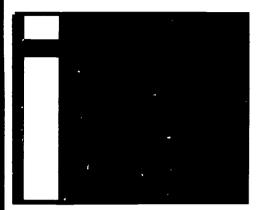


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INTRODUCTION



Not since the mid-1960s have public school teachers encountered such criticism of the quality of their work. Schools are implored to do it all — to give the disenfranchised equal oppportunity, to challenge the academically talented, to foster interracial acceptance, to instill democratic ideals and to encourage individuality and educational aspirations. Never have so many demands been placed on teachers with so little support and for so few rewards.







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As fingers are pointed at teachers, educational researchers disclose several alarming problems. Among the most urgent is the sharp decline in the college entrance test scores of students preparing to teach, compared to scores a decade ago. Defining the problem more clearly is the strong relationship between teachers academic talent and student learning. That is, teachers with high academic ability seem to have far greater success in helping students learn than teachers with low academic ability.

A second alarming problem is that schools are unable to retain their most academically able teachers. One study found, for example, that only 37% of those in the upper 10% of measured verbal ability remained in teaching after six years, while more than 60% of those in the lower 10% remained. In other words, individuals who are most likely to succeed in teaching are also most likely to leave it.

A third problem is the need to upgrade the skills of a teacher work force considerably older than the work force of a generation ago Bringing the problem into clearer focus is the lack of a relationship between years of experience and classroom effectiveness. Neither do teachers' advanced degrees have a demonstrable benefit for student learning. It has long been assumed that experience and advanced training yield better classroom performance, but the data indicate otherwise, when public school systems pay higher salaries to teachers with more experience and credentials, they do not purchase greater teaching power.

State governments are responding to public concern about education with a variety of initiatives, including career ladders and merit pay, that come not from the educational community but from politicians. One unfortunate side effect is that several of the most profound problems in the teaching profession remain inadequately diagnosed. Many reform proposals lauded by the general

public are feared by teachers as simplistic and unworkable. Educational reform would be much more likely to succeed if it were informed by knowledge of the research on teaching and analysis of the policy implications of that research.

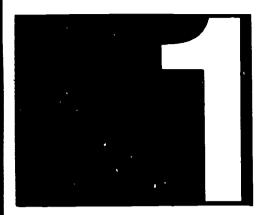
In this paper I explore 10 popular assumptions that underlie many of the new proposals to solve the problems of the teacher work force. I will argue that many of these underlying assumptions are unsupported by research on teaching. I will also argue that the ability to attract, train and keep good teachers depends heavily on base salary, the organizational conditions of work and the professional development opportunities in addition to the type of incentive system offered by the school.







MYTH 1: PAY TEACHERS MORE AND THEY WILL TEACH BETTER



Underlying this political platitude are several assumptions. One is that teachers find money to be the rewarding aspect of their jobs. A second is that teachers can be motivated to improve by monetary incentives. A third is that teachers now withhold services from students that they would supply if their salaries were better. Last is the assumption that individual teachers can improve if only they are properly motivated. The merits of each assumption are addressed below.



eachers have seldom said they consider salary a rewarding aspect of their work, even when salaries kept better pace with the national economy than they do now Indeed, for most teachers the rewards of teaching are not at all extrinsic Teachers instead value the intrinsic, psychic rewards that come from students' academic accomplishments and from confidence in their own ability to help students learn. It is precisely for these rewards that people first choose teaching as a career. When students grow and develop, teachers gain greater confidence in their abilities to make a difference in the lives of their students. Because intrinsic rewards accrue to successful teachers, these teachers

seek ways to make themselves even more effective. That is, professional success generally begets greater professional success.

The assumption that monetary incentives motivate teachers has received only scant attention by educational researchers. One large national study, however, found money to be a **disincentive** for teacher change. That money would not motivate the service-oriented seeins plausible. Indeed, we know that teachers will do little to change unless they value highly the rewards for change and they have a reasonable chance of success. Teachers seem motivated to change only when they believe that the attempt will enhance their effectiveness with students.





Evaluating the assumption that teachers withhold services that they would contribute if they were better paid is a bit more complicated. As noted above, higher pay is unlikely to promote better professional performance Flut in teaching as in any profession, a reduction in service may sometimes occur where benefits are few. That is, teachers unstintingly put forth effort only insofar as the professional rewards of their work outweigh the frustrations. Where their experience proves otherwise, discouragement sets in At this point teachers may leave the profession altogether or transfer to a school that offers them greater potential for psychic rewards. If neither alternative seems satisfactory, they may reduce their professional commitment In extreme cases, teachers "burn out," resorting to such behavior as chronic absenteeism Furthermore, frustrations frequently result from factors far beyond teachers' control

The assumption that, given proper motivation, teachers can improve individually is refuted emphatically by research showing how organizational conditions in schools can hinder individual improvement. Because changing these conditions is fundamental to educational reform, I describe them at some length.

Teacher Isolation

One of the greatest obstacles to individual improvement is the isolated nature of teachers' work. Teachers spend much of their time cut off from colleagues, neither seeing nor hearing others teach. Indeed, many teachers report no adult contact at all during the working day. In isolated settings, teachers come to believe that they alone are responsible for running their classrooms anc' that to seek advice from colleagues is to admit incompetence. Unsolicited offers of advice by colleagues are equally onerous and carry with



them the reverse implication of greater competence. So when teachers in iso. ated settings talk together, the substance of their conversation is seldom professional. Talk about politics, sports and the latest trends predominates, interrupted by the occasional swapping of stories about hopelessly uncooperative students or parents.

solation is perhaps the greatest impediment to learning to teach, or learning to teach better, because most learning by necessity occurs through trial and error. One alarming consequence is that a teacher's growth depends heavily on his or her own ability to detect problems and find solutions. Teachers in isolated settings are more apt to follow models of excellence recalled from their student days than to seek models among their contemporaries. As a result, teachers benefit little from the experience of colleagues. That is, practical knowledge acquired by experienced teachers is seldom passed along to new recruits.

Teachers restricted to trial and error learning are limited in their capacity to grow without the benefit of colleague's professional knowledge Limitations of learning on one's own in part explains why years of experience are unrelated to effectiveness with

students According to this research, teachers reach their prime after about four or five years Thereafter, their effectiveness with students begins to decline

School Leadership

Principals help or hinder teaching effectiveness in several ways. Recent research has shown, for example, that effective principals set specific goals related to student achievement. Common goals help teachers decide what to emphasize in their teaching and how to evaluate their success. Without common objectives, efforts are fragmented and teachers have no shared basis for knowing when their efforts have produced the desired effects. Of equal concern, there may be no shared basis for professional dialogue.





In the absence of clear school goals, principals have little basis for evaluating teacher effectiveness and seldom take time for classroom observation. They then cannot identify problems in performance or provide advice. Targets for improvement are not apparent, and change becomes unlikely without a clearly perceived need. Without clear goals, principals are also unable to dispatch support services where they are most needed, select the most appropriate instructional materials, coordinate instructional programs or bring teachers together to discuss common instructional problems.

neffective principals do not support teachers in ways that maximize their efforts to learn. For example, one of the frustrations teachers cite most frequently is interruption of teaching by requests to attend to relatively trivial administrative matters. Effective principals remove obstacles to good teaching, but ineffective principals do not. They do not, for example, prevent classroom interruptions by announcements, school assemblies or other intrusions nor provide clerical assistance for routine paper work. The proposition that teachers cannot function optimally when they have too little time and materials seems logical enough.

Disruptions by disorderly students also hinder learning to teach. Ineffective principals do not set clear policies for student discipline that are consistently enforced. Quite simply, students who are disorderly learn less than students who are not. The absence of school standards for student behavior forces teachers to develop individual standards that sometimes conflict, what is cheating in one classroom may be cooperation in another Needless to say, the absence of agreement on disciplinary standards makes enforcement difficult. When teachers are forced to spend their energies on disruptive students, they do so at the expense of instructional time and their own improvement

Clearly, then, learning to teach is far harder in some schools than in others Unfortunately, ideal working conditions in



schools are the exception. Typical conditions of isolation, lack of professional interaction and poor supervision present problems that are particularly acute for beginning teachers.

To review, paying teachers more is not likely to result in better teaching. Because teachers value most the intrinsically rewarding

a. pects of their work, their impetus for change comes primarily from the possibility of greater success with students. Isolation from professional knowledge and a lack of administrative support are two critical reasons teachers fail to develop professionally. Inability to grow professionally in turn diminishes teachers' psychic rewards from students and prompts them to leave teaching.



MYTH 2: COMPETITION AMONG TEACHERS FOR CAREER ADVANCEMENT AND HIGHER PAY IS A SOUND WAY TO IMPROVE THE QUALITY OF THEIR SERVICE



Some proposals rr ommend quotas on the number of teachers who can advance to higher positions (for example California's "mentor teacher" plan) Experience suggests, however, that competitive rewards may have unintended negative consequences for teachers' collegial relations and their efforts to improve Summarized below is research on cooperation among teachers that optimizes student learning and on the effect of competition on group interaction



Collaboration in Effective Schools

Nowhere is the danger of competition potentially more acute than in schools where teachers are isolated professionally. Research on successful schools suggests that schools where gains in student learning are greatest do not isolate teachers from each other. Instead they are places where professional dialogue is frequent and cooperative. In effective schools, teaching is believed to be a collective rather than an

individual enterprise, analysis, evaluation and experimentation in concert with colleagues help teachers become more effective instructors.

In collaborative settings, teachers interact whenever there is opportunity — in training sessions, faculty meetings, hallways, teachers' lounges and classrooms. This interaction is based on professional concerns and involves more faculty than do the more social conversations in less effective schools. Requests for, and offers of, assistance are more frequent in collaborative schools than experience-swapping. It seems that teachers



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garnerfreshideas from their colleagues rather than sympathy and social support

In effective schools, learning to teach is easier for beginning teachers. Novices elsewhere tend to cover up their mistakes rather than risk revealing some professional inadequacy. But in collaborative settings they have less reason for disguise. In fact, in these settings they have compelling reasons to disclose early mistakes. Where faculty share ideas about teaching, beginners want to become effective as soon as possible so they can begin making contributions of their own. Novices maximize their own intrinsic rewards, too, if they can improve their teaching after seeking the advice of colleagues.

New ideas produced by conversations among teachers give rise to greater experimentation within classrooms, which often makes teachers more effective in meeting their students' needs. With increased teacher effectiveness, of course, come greater intrinsic rewards.

Enthusiasm is contagious. In collaborative schools, teachers come to believe that even the most difficult students can learn and that they can reach these students. Because teachers in these settings believe that their colleagues can help them improve, and that help is both necessary and legitimate, requests for, and offers of, assistance increase over time. Successful problem solving generates higher hopes for professional success and greater experimentation with ideas that contribute to success.

Patterns of faculty exchange are dramatically different in isolated settings. There time dampens teachers' optimism about the learning potential of difficult students and their confidence in their ability to help these students learn. Because teachers have no proof of their effectiveness and little knowledge of what occurs in classrooms around them, exchange among older teachers declines substantially, which in turn serves to confirm the belief that some classroom problems have no solutions.

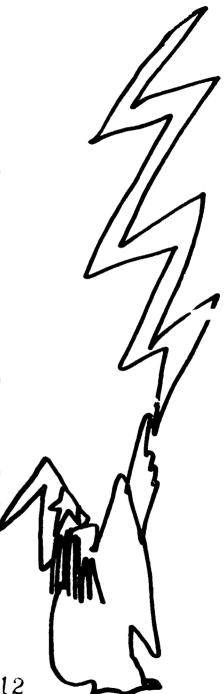
Clearly, some chools foster the professional development of teachers niore than other schools. Collaborative settings foster group problem solving and offer continuing opportunities to improve. New ideas generated from teachers' exchanges lead to better solutions to classroom problems. It is not surprising that the relationship between teachers' years of experience and student learning is far stronger in collaborative settings than in isolated ones.

If teachers clearly aster more skills in collaborative settings, it makes sense to find ways to promote more collaboration and to minimize isolation. One sure way to defeat that purpose, however, is to create competitive rewards.

The Effect of Competition on Collaboration

Competitive rewards may have harmful effects on teachers' professional relations. There is evidence that competitive rewards close rather than open communication among people who work together, cloud comprehension of differing viewpoints and destroy trust among group members. In competitive settings, encouragement among group members is substantially reduced and group problem-solving capacity is diminished. In fact, competitive conditions may lead people to frustrate their colleagues' efforts deliberately

Because teachers' development of skills depends so heavily on collaborative exchange, it seems likely that competitive rewards will substantially thwart efforts at improvement. Competitive rewards may even accelerate professional isolation in schools and inhibit problem solving. In particular, where advancement depends heavily on the failure of others, sharing of teaching materials, methods or ideas is unlikely. It is entirely possible that teachers may conclude that success in this reward structure comes only at the price of positive collegial relations.





MYTH 3: PROMOTIONS AND INCENTIVE PAY WILL KEEP GOOD TEACHERS IN TEACHING



Research on why teachers remain in teaching or decide to leave supports the idea that teachers consider intrinsic rewards more important than extrinsic rewards. People who leave the profession report overriding doubt about their ability to succeed with students Their specific reasons for leaving tie directly to working conditions that i egatively affect their professional performance a lack of opportunity for professional growth and development, inadequate preparation time, conflict with principals or colleagues and the failure to deal effectively with student misbehavior Teachers do cite salary as a contributing factor. But they generally subordinate salary to factors that influence their success with students







eacher attrition is greatest in inner-city schools serving poor, minority populations, where the problems of limited professional growth, slow academic progress, studen's misbehavior and lack of administrative support converge (One urban school experienced a 57% turnover in a single year) The pre-eminence of intrinsic over extriction rewards is illustrated in a recent study of incentives, in which teachers were given bonuses in an attempt to retain them in urban schools suffering high turnover. The teachers were flatly unpersuaded, and departures from these schools continued unabated Especially apt to leave inner-city schools are the brightest teachers, who often find new teaching assignments. The special problems of inner-city schools are explored elsewhere in greater detail. Here it is important to note that where turnover is high, teachars have little opportunity to develop the c gial relations that make student and teacher learning possible Equally troubling is the finding that teachers with the least experience, training and seniority are most likely to be placed in inner-city schools. Their failure to collect sufficient psychic rewards, their isolation from colleagues and the instabilities produced by high rates of turnover combine to produce frustrations that ar outweigh rewards. It is under these conditions that teachers most likely leave

Given that beginning teachers are frequently placed in the schools least likely to enhance their learning, it is not unexpected that the exodus from teaching occurs most frequently in the first few years of teachers' careers. Some researchers estimate that about 50% of the people now in their first year of teaching will not be teaching seven years from

now Two-thirds to three-fourths of teachers who leave the profession do so in their first four years. Teachers seem to leave teaching while losses still seem minimal — before they have invested large amounts of time, effort and psychic energy.

Underscoring the contribution of working conditions to teacher turnover is the fact that rates of attrition are not high in all inner-city schools. Presumably because they offer teachers greater professional rewards, the most successful urban schools do not experience high teacher turnover and therefore have more experienced teachers on staff. Their continued participation makes constructive coilegial interaction possible.

n sum, decisions to leave teaching seem tied to the absence of professional success in the early stages of teachers' careers. Therefore, neither promotions nor salary increases are likely to reduce attrition. More important, promotions and salary increases are designed to reward many years of professional success. Teachers who do not succeed early in their careers are not likely to endure years of continuing difficulty in the classroom in order to receive higher pay and promotions later.



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MYTH 4: CAREER LADDERS WILL ENCOURAGE TEACHERS TO IMPROVE



Some career ladder plans recommend that more advanced teachers be assigned responsibilities for teaching special populations of students or for developing curricular programs. But promoting the best teachers in this way will do little to change the quality of instruction, because promotions in and of themselves do little to develop the skills of the rest of the teachers. However, career ladders can be designed to give experienced teachers responsibility for training beginners and thus make continuing professional development more the rule rather than the exception. The research on school effectiveness discussed earlier and research on teacher improvement discussed below provide particularly helpful pointers



At present, inservice training for teachers is generally short-term or infrequent, not specific, designed by central administrative staffs and not very effective. There is, however, growing agreement about the characteristics of more effective inservice programs.

- Effective programs are targeted at the needs teachers and administrators themselves define.
- Inservice training is a continuous process that is integrated into the regular school day.

- 3. Training is flexible and practical enough to permit teachers to adapt what they learn to their particular classrooms.
- Formal training is followed by collegial exchange about the usefulness of what was taught.
- 5. Supporting materials and technical assistance help teachers apply and test what they have learned.
- 6. Principals and teachers are committed to change.



t seems possible that all teachers can improve iri a highly collaborative school environment Research indicates several steps to take Criteria for advancement on a career ladder should include an ability to excel with colleagues as well as in the classroom Teachers who are promoted should receive specific responsibilities for the professional development of other teachers, including classroom observations. Advanced teachers should tutor their junior colleagues (Legislation enacted by Oklahoma and Tennessee incorporates versions of this idea) Because good teachers too often are concentrated in only a few schools, it also seems crucial that career ladder plans address distributive inequalities Unless every school has at least a small cadre of good teachers, there is no support system to ease transitions into teaching or, more important, to help all

EXCELLENT WORK

teachers develop professionally. If good teachers, working with other good teachers, become even better, it makes sense to disperse small teams to all schools. While this idea must be implemented locally, states can issue guidelines to emphasize its importance

While continuing training would no doubt benefit all teachers, it would especially help beginning teachers. Where beginning teachers receive no guidance from experienced, successful teachers, they often undergo severe "reality shock," as idealism gives way to an understanding that one must manage students' sometimes-unruly behavior before one can teach them. In isolated settings, reality shock prompts rather negative attitudes. The view that each student has different needs gives way — usually within the first year — to a custodial view. The maintenance of order is stressed, students are distrusted and a punitive attitude toward control predominates.

As earlier noted, the more classroom time spent managing disorderly students, the lower student learning and teachers' psychic rewards. When disillusionment sets in, so, too, do disaffection and a desire to leave teaching.

New teachers in collaborative settings, however, appear more likely to maintain the view that tending to the individual needs of students is important. The emphasis on skill development and ways to resolve teaching problems helps beginners avoid a custodial attitude, which in turn lessens reality shock Thus, if highly skilled teachers support beginning teachers, the desire of new teachers to leave the work force may be substantially reduced Supporting the work of novices benefits experienced teachers, too Experienced teachers in collegial settings are more likely to perceive themselves as influential and skilled than experienced teachers in isolated settings. Recognition or approval from colleagues is a psychic reward that increases a teacher's likelihood of remaining in the profession

To review, career ladders will help improve teachers' classroom skills only if advancement is anchored securely in collaborative working arrangements and if proinotions bring responsibilities for staff development. Under these conditions, the skills of teachers are likely to develop, and fewer teachers are likely to leave the profession. But simply rewarding good teachers on the basis of their classroom performance will do little to help the majority of teachers improve



MYTH 5: CAREER LADDERS AND INCENTIVE PAY WILL ATTRACT MORE ACADEMICALLY TALENTED PEOPLE INTO TEACHING This claim is based on several assumptions. The first is that money and status are the rewarding aspects of teaching. The second is that beginning teachers will delay gratification from their work until they are eligible for promotions and raises. The third is that low salaries and the low status of the teaching profession keep academically talented college students from choosing teaching as a career. The first assumption, scrutinized earlier, lacks substance. No ren arch has addressed the second assumption But it is reasonable to suppose that the prospect of career advancement only after some 7 to 14 years of successful service would dampen the spirits of the most enthusiastic prospective teacher. It seems logical to assume that incentives to teach are unlikely to succeed unless they are a good deal less remote



Evaluating the third assumption requires reviewing why people do and do not enter teaching. The decision to enter any occupation is shaped by three major factors 1. personal definitions of career success. 2. the availability of professional alternatives that satisfy that definition, and 3. the feasibility of those alternatives. People who enter teaching, not surprisingly, cite the importance of serving others. Other service occupations (such as medicine or law) are now more feasible for people who once chose teaching In particular, affirmative action programs have brought new employment opportunities for women (who constitute the majority of teachers), and other professions now compete successfully with teaching for academically capable female students

Individuals who today choose alternatives to teaching frequently cite low starting salaries and low status as their major reasons. Teaching recruits and experienced teachers concur that low starting salaries discourage prospects who have academic talent. Women of high academic ability see opportunities for better pay and higher status elsewhere and seem to attach greater importance to these factors than women who

teach This latter finding may be explained by the absence of higher-paying, higher-status alternatives for those individuals who currently become teachers. The declining academic proficiency of the teacher work force illustrates this proposition.

The finding that low starting salaries and low occupational status discourage many talented college students from becoming teachers lends substance to the third assumption. Efforts should therefore be made to raise base pay for teachers and raise the status of the profession. These efforts are complementary if one assumes that increased professional knowledge and teaching success will yield higher status !f the academically talented presently reject teaching in part because of salary, and if these same individuals have the highest probability of teaching success, the net effect of salary increases should be to attract these talented youth into the profession, increase the productivity of schools and thereby raise the status of the profession. However, as has been demonstrated earlier, simply raising salaries may do little to keep talented teachers in the profession, these same individuals are most likely to leave teaching early in their careers

t is here that an inconsistency in the research on teaching surfaces. If the academically talented are most likely to succeed with students and if attrition in teaching results from a lack of success with students, why are the most capable also most likely to leave teaching? There are many ossible hypotheses. One is that the expectanons of academically able teachers may be higher than the expectations of the less academically able If student learning does not match these high expectations, dissatisfaction and attrition may result, in spite of absolute gains in student learning. Another possibility is that academically talented teachers are more quickly frustrated by less enthusiastic colleagues or principals. Accustomed as they are to academic success and eager as they are to contribute, they may consider their professional skills greatly underutilized. This idea gains support from the previously reported finding that teachers whose contributions are not acknowledged by coworkers are likely to defect from teaching Particularly when beginners disagree with principals over teaching policies, adherence to such policies spawns career dissatisfaction, reduces the opportunities for professional success and increases the likelihood they will leave teaching

To review, career ladders and incentive pay may not attract students of greater academic talent into teaching. It appears that base pay should instead be raised, to make teaching financially competitive with the other professions that now recruit academically able college graduates.

DO OVER

MYTH 6: TEACHERS WHO ARE PROMOTED UP CAREER LADDERS CAN EVALUATE OTHER TEACHERS FOR PROMOTION



Almost any reasonable person can be trained to monitor teachers' classroom performance. But placing the responsibility for monitoring in the hands of colleagues may have unintended negative consequences. This is because evaluation can be performed for two altogether different purposes to make judgments about tenure or promotion or to provide teachers with information that will help them improve Problems can arise when the same person carries out both functions Teachers who risk negative judgments about promotion from colleagues or supervisors are not likely to seek assistance from them, because the costs of revealing inadequacies are too high. Moreover, the evaluating teachers who exercise the objectivity required to recommend career decisions may repress the warmth, understanding and support they need to help their colleagues improve



These negative consequences pose a dilemma. One reason many merit pay experiments have failed is that they produced severe tensions among colleagues. Tensions such as rivalry and anxiety about evaluation reduce the sharing and problem solving that ought to occur among teachers. They are therefore the tensions schools must avoid if teachers are to become better and stay in teaching. Evaluation by one's peers for the purpose of advancement, then, may produce behavior that contributes to the problem the career ladder was intended to solve.

see at least two possible solutions to the dilemma. The first is to separate responsibilities for the two types of evaluations, placing responsibility for staff development inside the school and responsibility for decisions about career advancement outside the school. The second solution is to provide

incentives to schools rather than to individual teachers. Schools that make substantial progress toward learning goals might be recognized with rewards teachers find satisfying — with resources to help them improve further (e.g., equipment or personnel, special inservice training, released time for visits to other schools) Relative improvement is rewarded rather than absolute performance. and school improvement becomes a team effort rather than an individual undertaking. Teachers have incentives to help each other improve, the principal and colleagues support the effort and powerful peer pressure can be wielded against those reluctant to attempt improvement. It is important to note, however, that school incentives are unlikely to raise productivity if school officials do not know how their teachers can be best helped to improve and do not act on their knowledge



MYTH 7: SINCE ALMOST EVERYONE CAN RECALL AT LEAST ONE GREAT TEACHER, THE CHARACTERISTICS OF GREAT TEACHERS ARE EASY TO IDENTIFY





Since politicians and other concerned citizens outside teaching have had first-hand experience with teachers, many of them have faith in their own diagnoses of educational ills and their own home remedies. This is somewhat like claiming that anyone who has ever been treated by a physician knows precisely what constitutes sound medical practice Actually defining teaching excellence remains a problem for even the most sophisticated educational scholar, and researchers are only now approaching solutions after decades of work. Studies that have examined ratings of teachers made by people outside teaching show that ratings by reasonably sophisticated observers are unrelated to student gains in achievement Nonetheless, blue ribbon panels or commissions continue to try to solve the problem of defining teaching excellence

Teachers themselves often report difficulty in knowing precisely how well they are doing. When teachers were asked to identify the skills critical to successful teaching, the majority of items they listed had no empirical relationship to student learning. In fact, some chose items likely to indicate ineffective teaching.

An example seems warranted Folklore holds that lavishing praise on poor students motivates them to improve Actually, though, praise often had the opposite effect, revealing academic inferiority to students' peers In some settings, diffuse praise has no association with how much students progress academically Ineffective teachers may praise low-achieving students about as much as effective teachers

If teachers cannot define effective teaching and outsiders know even less, how can standards of excellence be set? And why is this such an important problem? The second question is addressed first

Standards of excellence are crucial to educational reform because they provide targets for change. As noted earlies, schools today have no clear purpose. Teachers are left to find their own educational missions, wondering if their responsibilities are primarily cognitive, social or custodial. Only in rare instances do schools set explicit goals. Perhaps the current political and public interest.

in education will produce a clearer sense of purpose on which the priorities of teaching can be based

It seems important that the criteria for promotion or for incentive payrelate to the improvement of teaching and student learning if the criteria fail to specify those skills that are known to relate to student learning, or, worse still, if the skills specified have no relationship to student learning, we risk encouraging practices that will make teachers no more effective than they are now

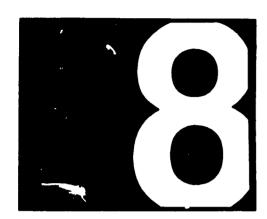
In the last 10 years, educational researchers have observed teachers who produce substantial gains in student learning and identified some types of behavior that lead students to master basic skills. But we still know relatively little about what behavior helps students master higher-order skills. Then, too, research to identify the processes of effective teaching is more advanced than research to determine the content of what students should learn.

t is known that teachers who are good classroom managers spend more time instructing students. It is also known that interaction compels students' attention better than seat work While good management and interactive teaching have been empirically linked to student learning, what constitutes appropriate content for a lesson is far less certain. For instance, despite the knowledge that sentence diagramming does not help students improve their writing skills, diagramming is nonetheless taught in most junior high schools Teachers could design activities in sentence diagramming that compel students' attention, lead them to master diagramming and still not help students improve their writing

Thus, current knowledge lays a foundation for constructing standards of teaching But the goals of teaching, the means to achieve those goals and the ways to measure successful teaching remain in disarray. It is clear that definitions must be constructed through the concerted efforts of the entire educational community.



MYTH 8: THE SCORES STUDENTS MAKE ON TESTS ARE A GOOD MEASURE OF TEACHER EFFECTIVENESS



It hardly seems fair to hold teachers accountable for how much students learn when the major factors that influence learning are outside their control. For example, what students have learned before they reach the classroom has been estimated to account for as much as 71% of what they know. Among the other factors that influence learning over which the teacher has little say are the academic composition of the class, the instructional effectiveness of the school, class size, the motivation students receive from their peers, the resources of the school district and the match between curriculum and achievement tests.

An additional problem is that teaching quality is not amenable to short-term monitoring. That is, the student achievement gains of individual teachers show marked instability from year to year. Researchers have calculated that reliable judgments of teacher effectiveness would require more than 20 years of monitoring test scores. At present, no statistical formula or computer model of effectiveness yields valid, reliable or practicable results.





MYTH 9: AN EFFECTIVE TEACHER IS EQUALLY EFFECTIVE IN ALL SETTINGS



On this point the repearch seems very clear there is no one best way to teach, in terms of methods, behaviors or choice of instructional organization. A teacher's effectiveness is not uniform — it depends heavily on specific situations and contexts. The same individual who teaches poorly in one setting (and is judged unsuccessful) may teach superbly in another. The many variables that affect student learning and the many different learning goals combine to require a full repertoire of teaching strategies.



Teaching strategies that are effective with one group of students may not be effective with another. For example, elementary students of low socioeconomic status learn more basic skills when teachers assign work than when students make their own choices, but students of higher socioeconomic status complete more work when they set their own schedules Highachieving students need more challenging work more quickly, lower-achieving students seem to require a slower pace and an opportunity to overlearn basic skiils Researchers have also found that different grade levels and subject areas call for entirely different teaching approaches

The ways teachers organize instruction do not seem to produce consistent patterns of student learning. Some researchers argue that teaching the class as a whole is the

best compromise one can make with limited teaching resources. Other researchers find whole-class instruction inadequate for dealing with students who need very different types of instruction. It is crucial to note the contextual effect, however Children in classes studied by researchers making the first claim varied little in socioeconomic status (and, presumably, achievement), researchers making the second claim studied classrooms of far greater diversity. That teaching success depends on the situation may help explain why individual teachers see the achiever— it gains of their students varying greatly from year to year.

In sum, it seems reasonable to conclude from the literature on teaching effectiveness that no system of eval ating teachers can be context-free. What is called for instead is an educated eye that scans classroom settings and makes situation-specific judgments.





MYTH 10: GOOD TEACHERS ARE BORN NOT MADE

I SEE ME)



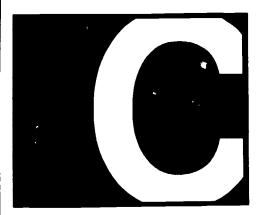
While teaching success is often less than stable or consistent, it is conspicuously absent in some schools, particularly those in the advanced stages of organizational lethargy. It is teachers in those schools who can be most helped to improve

n the last few years, educational research has produced more systematic ways to observe teachers and more useful ways to tell them what is occuring while they teach. It turns out that most teachers, intent upon their own actions, are unable to monitor themselves accurately But the researcher who provides teachers with ways to look at their own behavior can define clearer standards for measuring successful teaching, signal the need to develop new teaching skills and provide ways to improve That providing this sort of feedback to teachers results in greater student learning has been demonstrated. In other words, ineffective teachers become substantially more successful when behavior related to student achievement is monitored and evaluated. The view that "bad" teachers cannot improve seems inaccurate





CONCLUSIONS



Some efforts at reforming the teaching profession are proceeding at great peril. Policy makers who are overconfident that their tinkering will produce educational benefits need only confront recent research findings about schools. A look at these findings reveals that some reforms are not only unguided by substantive knowledge but also can be contrary to it. Changes would more likely have lasting benefit if research on teaching provided the direction. The implications of this research are summarized here.

- The intrinsic satisfactions of working with students are far more likely to motivate teachers to improve than extrinsic rewards such as money.
- 2. Teaching success is in large measure determined by organizational conditions in the schools, isolation from fellow teachers and an absence of administrative support are the greatest impediments to learning to teach.
- Competitive rewards for teaching excellence may accelerate professional isolation.
- Teachers become most effective in settings that foster collaborative analysis and experimentation.
- 5. Teachers who do not experience success leave teaching.
- Career ladders may increase teachers' acquisition of skills and reduce attrition if used as a vehicle for collaboration and staff development.
- 7. Recognizing talented teachers and giving them responsibility for staff development increases their intrinsic rewards and lessens the likelihood they will leave teaching.
- 8. Low starting salaries turn the academically talented away from teaching.
- Staff development and decisions about promotions should be separate.
- Standards of teaching excellence should be set by teaching professionals, be situationally determined and exclude standardized measures of student achievement.
- With the proper evaluation tools, most ineffective teachers can be helped to improve.

Evaluating proposals for reform against these findings seems relatively straightforward. Take, for example, initiatives

that waive requirements in education courses for arts and science majors seeking immediate certification. Although preservice programs may need scrutiny and improvement, abandoning them altogether is tantamount to throwing the baby out with the bath water As this paper has illustrated, there is a body of knowledge worth passing along to teacher recruits. Without preservice instruction of any sort, new teachers will have no pedagogical basis for making decisions, no prior exposure to classroom realities, and no models of teaching to guide them through their perilous first few months. The result of this particular reform may be that more teachers leave teaching even sooner. Thus, while the attempt to attract academically able students into teaching by waiving professional requirements may initially succeed, the solution itself will become part of the problem if it increases turnover If teachers are not shown how to increase their effectiveness, attracting the academically talented into teaching will ultimately fail to improve public education

It seems clear that the educational community needs to join in common purpose with leaders of educational reform to identify goals for public education and strategies for reaching them

Unless educational reforms address the realities of teaching by changing those aspects of school life that are most responsible for student and teacher learning, they are not likely to succeed Instead of giving teachers new chances at learning, succeeding and at helping their students and colleagues, we may unwittingly program them for more failure. The result will be continuing disappointment for, and about, students



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Ten common beliefs about how performance-based pay and promotions will help improve teaching are backed up against research findings in this book, and the author concludes that, essentially, they don't hold up. Although low pay discourages the academically able from entering or remaining in teaching, the author presents research that shows teachers to be more frustrated by their lack of success with students.

5. How States Can Improve Teacher Quality by Robert Palaich, Education Commission of the States (TQ84-5)

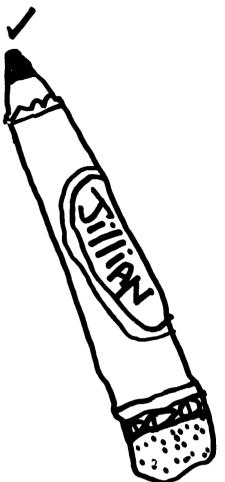
Local efforts to improve teacher quality can be initiated an/or bolstered by state actions, and Palaich offers a logical cumulative strategy for these actions. He covers screening for admission to schools of education, improving curriculum, graduation requirements, certification and tenure.

6. The Legal Context for Teacher Improvement by the Law and Education Center, Education Commission of the States (TQ84-6)

In an effort to pre-inform policy makers and administrators contemplating teacher improvement plans, ECS Law Center staff explain the legal aspects that may affect these plans, and discuss how to tailor plans to comply with constitutional and statutory requirements. Due process, civil rights, free speech, academic freedom, tenure, collective bargaining and governance issues are covered.

7. Evaluating Teacher Incentive Systems by Steven M Jung, American Institutes for Research (TQ84-7)

Jung develops a conceptual framework for evaluating teacher-incentive systems. A performance-based system, he says, bases rewards on behavior rather than on added responsibilities, and stated goals must mesh with goals in practice, if evaluations are to be valid. Jung also examines assumptions about teaching excellence and the process components of incentive systems.



8. School Organization and the Rewarda of Teaching by Tom Bird, Center for Action Research, Boulder, Colorado (TQ84-8)

Bird focuses on how to organize schools and school settings to encourage better teaching He describes organizational schemes that encourage staff to share understandings and techniques, help each other to improve and use research findings to test new methods. He sugges is that teachers and administrators be trained as role models, and recommends that experimental research applications be supported at the staff level.

9. The Costs of Performance Pay Systems by Kent McGuire, Education Commission of the States, and John A Thompson, University of Hawaii (TQ84-9)

Using two different evaluation schemes, the authors simulate the costs of merit pay, career ladders and extended contracts to show how costs — none of them prohibitive — vary with plan design. They procede the simulations with a thorough discussion of each cost factor involved.



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